## We claim:

- 1. An athermal process for the concentrating Garcinia extract, which comprises
  - a) collecting and cutting dried rinds of a fruit selected from *Garcinia* sp, G. pedunculata and G.cowa,
  - b) extracting the cut rinds with de-ionized water at a volume ratio of 1:4 for a period of 20-30 min at 115°C -130°C to obtain an extract,
  - c) filtering the extract to obtain a particle free extract, and
  - d) subjecting the particle free extract to osmotic membrane distillation in a co-current mode in the presence of an osmotic agent until the extract reduced to 1/5<sup>th</sup> of its original volume.
- 2. A process as claimed in claim 1 further comprising the step of obtaining hydrocitric acid from the concentrated extract of step (d).
- 3. A process as claimed in claim 1 wherein a hydrophobic membrane is placed between two steel frames SS316 of the module with suitable spaces.
- 4. A process as claimed in claim 1 wherein the extract is circulated at a flow rate of 100-150 ml/min on one side of the membrane using a multi-stage peristaltic pump.
- 5. A process as claimed in claim 1 wherein a hydrophobic membrane osmotic agent (OA) is placed on the other side of the membrane using a multi-stage peristaltic pump.
- 6. A process as claimed in claim 1 wherein the osmotic agent is saturated calcium chloride.
- 7. A process as claimed in claim 1 wherein the osmotic membrane distillation is carried out at ambient temperature of 25± 1°C and pressure of 1atm.
- 8. A process as claimed in claim 1 wherein the osmotic membrane distillation is carried on for about 4-6 hrs till the extract was concentrated in the feed tank.
- 9. A process as claimed in claim 1 wherein the free hydrocitric acid content in the concentrate is in the range 33-35 % estimated by HPLC method.
- 10. A process as claimed in claim 1 wherein the hydrocitric acid content was increased from 4-6 fold and HCA is present in the native form (not as derivative) with out formation of lactone, increasing it commercial and nutritive values.

- 11. An athermal process for the concentration of *Garcinia* extract comprising the steps of:
  - a) collecting the dried fruit rinds may be effected from the species of Garcinia
  - b) cutting the rinds of G. pedunculata /G.cowa manually to a size of 3x9mm to 6x14mm
  - c) extracting may be effected with de-ionized water at a volume ratio of 1:4 for a period of 15-35 min at 110-130°C.
  - d) filtering the above extract may be effected by filter cloth
  - e) concentrating the HCA by osmotic membrane distillation (OMD) in a cocurrent flat membrane module
  - f) placing a hydrophobic membrane between two steel frames SS316 of the module with suitable spaces
  - g) circulating the extract at a flow rate of 100-150 ml/min on the one side of the membrane using a multi-stage peristaltic pump
  - h) hydrophobic membrane osmotic agent (OA) on the other side of the membrane using a multi-stage peristaltic pump
  - i) carrying out OMD for about 4-6 hrs till the extract was concentrated in the feed tank.